City of Chattanooga, TN

Personnel Class Specification

Class code 0771

FLSA: Non-Exempt

CLASSIFICATION TITLE: TRAFFIC ENGINEERING DESIGNER

PURPOSE OF CLASSIFICATION

The purpose of this classification is to perform technical and analytical work functions associated with designing and coordinating traffic engineering and street lighting projects, reviewing site plans, and ensuring that projects comply with established criteria, codes, and safety regulations.

ESSENTIAL FUNCTIONS

The following duties are normal for this position. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

Provides direction, guidance and assistance to employees; coordinates daily work activities; organizes, prioritizes, and assigns work; provides training as needed; monitors status of work, inspects completed work, and troubleshoots problem situations.

Designs traffic operation enhancements; designs parking lot layouts and parking sites on streets; reviews traffic problem reports; analyzes various traffic study data in determining designs for improvement; coordinates project activities; attends related meetings.

Prepares temporary traffic control plans; reviews traffic control plans and approves/amends as appropriate.

Designs roadway illumination plans; reviews street lighting requests; performs street lighting surveys; prepares street light maintenance and street light request reports; reviews specifications of street lighting fixtures and makes recommendations.

Investigates traffic problems and street lighting outages/problems; analyzes accident records and related data; investigates sites and researches accidents; reconstructs accidents and draws diagrams; analyzes causes of problems/accidents; initiates or recommends appropriate corrective action, such as channelization redesign, signing, street lighting, guardrail application, or non-skid pavement treatment.

Prepares work orders to initiate requests for work or department response; reviews completed work orders for proper execution; documents department action and reports results of improvements.

Reviews/approves building permit engineering/site plans for compliance with all applicable codes, laws, rules, regulations, standards, policies and procedures; assesses impact of increased traffic volume on existing roadway conditions and possible future use/growth potential of building site; approves or amends site plans as appropriate.

Prepares property easements for temporary use of private property; performs research, writes easements, and draws plats.

Assists in planning/coordinating pavement marking replacement activities; obtains cost estimates for budgetary purposes; monitors pavement marking maintenance schedule; prepares appropriate work orders.

Receives and responds to maintenance proposals and installation proposals.

Responds to complaints and questions from contractors, citizens, and field crew supervisors; provides information, researches problems, and initiates problem resolution.

Serves as department liaison at construction meetings, community organization meetings, and with outside agencies; records notes/minutes of neighborhood meetings to relay citizen concerns to traffic engineering staff.

Makes field visits to sites; takes measurements; determines roadway and slope grades; uses stakes and spray paint to mark site locations/limits.

Researches property information.

Compiles various data pertaining to department activities/operations; performs research as needed; makes applicable calculations; analyzes data and identifies trends; prepares/generates reports and maintains records.

Prepares or completes various forms, reports, correspondence, property easements, traffic problem requests, traffic improvement reports, roadway illumination requests, work orders, meeting minutes, cost estimates, diagrams, graphs, or other documents.

Receives various forms, reports, correspondence, engineering plans, traffic problem reports, traffic study data, traffic control plans, specifications, cost estimates, codes, policies, plats, maps, manuals, reference materials, or other documentation; reviews, completes, processes, forwards or retains as appropriate.

Performs computer-aided design (CAD) operations and manual drafting/sketching.

Operates a computer to enter, retrieve, review or modify data; utilizes word processing, spreadsheet, drafting, computer-aided design (CAD), geographical information system, or other software programs.

Operates/utilizes various equipment and tools associated with work activities, which may include a motor vehicle, light meter, inclinometer, line level, drafting instruments, measuring tape, and radio communications equipment.

Communicates via telephone and/or two-way radio; provides information; takes and

relays messages; responds to requests for service or assistance.

Communicates with supervisors, employees, other departments, city officials, contractors, inspectors, outside agencies, the public, and other individuals as needed to coordinate work activities, review status of work, exchange information, or resolve problems.

Maintains a comprehensive, current knowledge and awareness of applicable laws/regulations; maintains an awareness of new trends and advances in the profession; reads professional literature; attends workshops and training sessions as appropriate.

ADDITIONAL FUNCTIONS

Performs miscellaneous tasks, such as verifying block numbers, locating sign placement, reviewing street cut permits, retrieving accident and count data, copying documentation, or sending/receiving faxes.

Performs other related duties as required.

MINIMUM QUALIFICATIONS

Vocational/Technical degree with training emphasis in traffic engineering, civil engineering, or related field; supplemented by three (3) years previous experience and/or training that includes traffic engineering, traffic control design, roadway design, or accident reconstruction; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. Must possess and maintain valid Work Zone Traffic Control Supervisor Certification. Must possess and maintain a valid Tennessee Driver's License.

PERFORMANCE APTITUDES

<u>Data Utilization:</u> Requires the ability to review, classify, categorize, prioritize, and/or analyze data. Includes exercising discretion in determining data classification, and in referencing such analysis to established standards for the purpose of recognizing actual or probable interactive effects and relationships.

<u>Human Interaction:</u> Requires the ability to provide guidance, assistance, and/or interpretation to others regarding the application of procedures and standards to specific situations.

Equipment, Machinery, Tools, and Materials Utilization: Requires the ability to operate, maneuver and/or control the actions of equipment, machinery, tools, and/or materials used in performing essential functions.

<u>Verbal Aptitude:</u> Requires the ability to utilize a wide variety of reference, descriptive, and/or advisory data and information.

<u>Mathematical Aptitude:</u> Requires the ability to perform addition, subtraction, multiplication and division; ability to calculate decimals and percentages; may include ability to perform mathematical operations with fractions; may include ability to compute discount, interest, profit and loss, ratio and proportion; may include

ability to calculate surface areas, volumes, weights, and measures.

Functional Reasoning: Requires the ability to apply principles of rational systems; to interpret instructions furnished in written, oral, diagrammatic, or schedule form; and to exercise independent judgment to adopt or modify methods and standards to meet variations in assigned objectives.

<u>Situational Reasoning:</u> Requires the ability to exercise judgment, decisiveness and creativity in situations involving evaluation of information against measurable or verifiable criteria.

ADA COMPLIANCE

<u>Physical Ability:</u> Tasks require the ability to exert very moderate physical effort in light work, typically involving some combination of stooping, kneeling, crouching and crawling, and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (12-20 pounds).

<u>Sensory Requirements:</u> Some tasks require the ability to perceive and discriminate colors or shades of colors, sounds, depth, texture, and visual cues or signals. Some tasks require the ability to communicate orally.

<u>Environmental Factors:</u> Performance of essential functions may require exposure to adverse environmental conditions, such as dirt, dust, pollen, humidity, rain, fumes, temperature extremes, machinery, traffic hazards, or toxic agents.

Chattanooga, Tennessee, is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.